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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.   | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------|------------------|
| 10/749,049   | 12/29/2003  | Hossein Eslambolchi  | 2002-0496             | 7380             |
| 26652  | 7590        | 07/31/2007           |                       |                  |
| AT&T CORP.<br>ROOM 2A207<br>ONE AT&T WAY<br>BEDMINSTER, NJ 07921 |             |                      | EXAMINER<br>MUI, GARY |                  |
|  |             |                      | ART UNIT              | PAPER NUMBER     |
|  |             |                      | 2616                  |                  |
|  |             |                      | MAIL DATE             | DELIVERY MODE    |
|  |             |                      | 07/31/2007            | PAPER            |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                               |                                    |  |
|------------------------------|-------------------------------|------------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/749,049 | Applicant(s)<br>ESLAMBOLCHI ET AL. |  |
|                              | Examiner<br>Gary Mui          | Art Unit<br>2616                   |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-10 and 12-17 is/are rejected.
- 7) ☒ Claim(s) 4 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claims 7 and 8 are objected to because of the following informalities:

For claim 7 line 1, the occurrence of "and" seems to be a typo, it is suggested to the applicant to change "and" to --an--. Similar problem exist for claim 8.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 3, 5 – 10, and 12 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris (US 5,946,373) in view of Gentile et al. (US 6,545,976 B1).

For claim 1, Harris teaches receiving information identifying a higher-level alarm associated with the SONET facility; receiving information identifying a higher-level alarm associated with the SONET facility (see column 1 line 61 – column 2 line 7 and column 2 lines 40 – 65; the fault management system (FMS) receives multiple alarms that indicate circuit failures and trunk failures; the truck carries circuits of lower capacity levels). Harris et al fails to teach determining the minutes of outage. Gentile et al from the same field of endeavor teaches a timer is used to make a precise calculation of the outage time from the first error to the last error (see column 2 lines 25 – 33;). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the alarms as taught by Harris as the error indicators in Gentile et al. measurement system. The motivation for doing this is to increase the accuracy of the outage calculation.

For claim 3, Harris teaches the correlating the information identifying a higher-level alarm associated with a SONET facility with the information identifying a lower-level alarm with the SONET facility (see column 2 lines 40 – 65; for the alarms that is receives and will correlated them to each other by using a database that describes the network topology). However, Harris fails to teach the determining the minutes of outage. Gentile et al. form the same field of endeavor teaches the outage time calculation (see column 2lines 25 – 33).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to correlate the alarms as taught by Harris as into Gentile et al. outage measurement system. The motivation for doing this is to increase the accuracy of the outage calculation.

For claim 5, Harris teaches acquiring facility hierarchy information, the facility hierarchy information depicting a facility hierarchy, the facility hierarchy including levels (see column 1 line 61 – column 2 line 7 and column 2 lines 40 – 65; the fault management system (FMS) receives multiple alarms that indicate circuit failures and trunk failures; the truck carries circuits of lower capacity levels. Harris fails to teach determining outage for each of the levels in the facility hierarchy in response to acquiring the facility hierarchy information and determining the minutes of outage in response to determining the outage for each of the level. Gentile et al from the same field of endeavor teaches a timer is used to make a precise calculation of the outage time from the first error to the last error (see column 2 lines 25 – 33;). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the alarms as taught by Harris as the error indicators in Gentile et al. measurement system. The motivation for doing this is to increase the accuracy of the outage calculation.

For claim 6, Harris teaches the facility hierarchy information details a SONET facility hierarchy (see column 1 lines 49 – 60).

For claims 7 and 8, Harris fails to teach the levels include an OC48 level or OC1 level. However, it is inherent in a SONET system the there are levels of OC48 or OC1 levels.

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Therefore, it would have been obvious to one skilled in the art at the time the invention was made for the levels to include an OC48 or OC1.

For claims 9 and 10, Harris teaches the step of correlating the outage for each of the levels and the step of correlating the outage between the higher levels and the lower levels (see column 2 lines 40 – 65; the alarms that is receives and will correlated them to each other by using a database that describes the network topology). Harris fails to teach the correlating if for determining the minutes of outage. Gentile et al. form the same field of endeavor teaches the outage time calculation (see column 2 lines 25 – 33). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to correlate the alarms as taught by Harris as into Gentile et al. outage measurement system. The motivation for doing this is to increase the accuracy of the outage calculation.

For claim 12, Harris teaches operating a database storing facility hierarchy information representing a facility hierarchy; receiving alarm information; identifying new facility information representing at least one new facility in response to receiving the alarm information; storing updated facility hierarchy information by inserting the new facility information into the database in response to identifying the new facility information, the updated facility hierarchy information representing an updated facility hierarchy (see column 1 line 61 – column 2 line 7; column 2 lines 40 – 64; and column 4 lines 15 – 29; the FMS receives multiple receives multiple alarms that indicate circuit failures and trunk failures; the truck carries circuits of lower capacity levels; a topology database is also maintained and new alarms are added to the database to identify faults). Harris fails to teach determining the minutes of outage. Gentile et al. from the same field of endeavor teaches a timer is used to

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make a precise calculation of the outage time from the first error to the last error (see column 2 lines 25 – 33). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the alarms as taught by Harris as the error indicators in Gentile et al. measurement system. The motivation for doing this is to increase the accuracy of the outage calculation.

For claim 13, Harris et al. teaches the alarm information is received in response to polling (see column 3 lines 42 – 58; the remote monitoring system (RMS) monitors collections alarms and status information).

For claim 14, Harris et al. teaches the alarm information is formatted as a data stream (see column 3 lines 59 – 67)

For claim 15, Harris et al. teaches the updated facility hierarchy comprises the facility hierarchy information in combination with the new facility hierarchy information (see column 4 lines 15 – 29).

For claim 16, Harris et al. teaches the step of removing duplicate alarm information in response to receiving the alarm information and identifying new facility information, in response to removing the duplicate alarm information (see column 5 lines 51 – 67).

For claim 17, Harris et al. teaches the step of performing correlation on the updated facility hierarchy information (see column 2 lines 40 – 65; for the alarms that is receives and will correlated them to each other by using a database that describes the network topology).

However, Harris fails to teach the determining the minutes of outage. Gentile et al. form the same field of endeavor teaches the outage time calculation (see column 2 lines 25 – 33).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

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invention was made to correlate the alarms as taught by Harris as into Gentile et al. outage measurement system. The motivation for doing this is to increase the accuracy of the outage calculation.

***Claim Rejections - 35 USC § 103***

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harris and Gentile et al. as applied to claim 1 above, and further in view of Rice (US 7,107,353 B1).

For claim 2, Harris and Gentile et al. teaches all of the claimed subject matter with the exception of the step of receiving maintenance information and performing the step of determining minutes of outage in response to receiving the maintenance information. Rice from the same field of endeavor teaches messages scheduled maintenance information (see column 12 lines 14 – 30). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the maintenance information obtained from Rice system into Harris and Gentile combined outage measurement system. The motivation for doing this is to obtain the most accurate calculation for outage.

***Allowable Subject Matter***

7. Claims 4 and 11 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



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***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Afferton et al. (US 6,452,906 B1), Vedder (US 6,654,375 B1), Leroux et al. (US 6,717,909 B2), Cao et al. (US 6,721,269 B2), and Carder et al. (US 6,765,874 B1) are cited to show a SONET network outage impact measurement.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary Mui whose telephone number is (571) 270-1420. The examiner can normally be reached on Mon. - Thurs. 9 - 3 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GM

07.25.2002

  
RICKY Q. NGO

SUPERVISORY PATENT EXAMINER